Remarks and Arguments

The Examiner states that the inventions of Groups I-III do not relate to a single general invention concept, because they lack the same or corresponding special technical features for the following reasons:

The bioactive polypeptide derivative or functional fragment of claim 1 and a method of using it to protect plants are taught in the prior art as evidenced by Dzhavakhia et al (US 6,528,480B1). The Examiner states that Dzhavakhia teaches an isolated polypeptide from bacteria that protects plants from against pathogen infections, and said polypeptide is considered an active an functional fragment of Applicant's SEQ ID NO: 1. Therefore, the Examiner states that there is no special technical feature that links the polypeptide of Group I to the DNA of group II or the method of isolating the polypeptide of Group III.

Applicant respectfully objects Examiners statement for the following reasons:

1) The protein structure of MF2 disclosed by Dzhavakhia et al. in US 6,528,480B1 and MF3 disclosed here do not have any obvious sequence homologies. The only common feature is that they are both thermostable. (Page 4, line 25 of the specification).

2) The MF2 polypeptide has a molecule weight of 7,239 daltons, while the MF3 of the instant application has a molecule weight of 17,600 daltons (page 4, line 29 of the specification).

3) Dzhavakhia et al. US 6,528,480B1 disclose a protein called MF2 derived from *Bacillus thuringiensis*, while the current application discloses a protein called MF3 derived from *Pseudomonas fluorescence.* Thus the origin of the proteins is completely different.

4) MF3 polypetide disclosed in this application has a structure that resembles the enzyme peptidyl-prolyl *cis-trans* isomerase SlyD (page 5 line 3 of the specification) while MF2

disclosed in US 6,528,480B1 has a structure that resembles cold shock proteins (column II line 40).

Therefore, there is no basis to allege that the MF2 polypeptide of Dzhavakhia et al in US 6,528,480B1 would be an active of functional fragment of currently disclosed SEQ ID NO: 1. There is no basis to allege any kind of functional similarity of the two proteins and there is no obvious sequence homology between the two polypeptides.

The Examiner further stated that the special technical features of Group I that are not recited in any of the other groups are considered to be a bioactive polypeptide and a method of using said polypeptide with carrier molecules. The special technical features of Group II are considered to be an isolated DNA, a vector and transgenic plant/cell. The special technical features of Group II are considered to be cultivating a microbial strain, fractioning and gel electrophoresis steps. The applicant has amended claims 2 (Group II) and 10 (Group III) with the term bioactive, whereby the bioactive polypeptide becomes a feature that is recited in all of the groups.

Based on this, the applicant respectfully request reconsideration of the restriction requirement. Because Dzhavakhia et al in US 6,528,480 do not teach a polypeptide that could be an active or functional fragment of SEQ ID NO: 1 of the current application, there is a special technical feature that links the polypeptide of Group I to the DNA of Group II or to the method of isolating a polypeptide of Group III.

Conclusion

The applicant respectfully request reconsideration of the restriction requirement and combining the three groups into one group.

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